

T News Letter **TDARS**

G3ZME
G6ZME

TELFORD AND DISTRICT AMATEUR RADIO SOCIETY

www.TDARS.org.uk

FOUNDED 1969

www.TelfordHamfest.co.uk

Issue 250

www.TDARS.org.uk

Programme

February 2012

www.telfordhamfest.co.uk

February 15 *The UK Activity Contests(UKAC). By Dave G0CER. A good club approach*

February 22 *Shack Oddities. Bring along something unusual and explain ... !*

February 29 *Planning TDARS Portable, Special Event and Contest events 2012*

March 7 *V/HF On-the-Air & Committee Meeting LWVH.*

March 14 *Main Construction and Novice Constructors' Competition.*

March 21 *"AMSAT" by Paul 2E1EUB. Guest Speaker (and Trophy Winner 2011)*

March 28 *ANNUAL GENERAL MEETING (—Agenda page 3) 8pm*

April 4 *Committee & Station on Air. Venue LWVH (see page 3, second item)*

April 11 *"The Victorian Internet: the Age of Telegraph" Tony M0TAW*

April 18 *Using DF Hunt Equipment. Start Here !*

April 25 *Treasure Hunt—in Little Wenlock (organiser Martin 2E0TRO)*

May 2 *Committee Meeting, general and G3ZME on-the-air.*

May 9 *Military Vehicles Demo. Village Field & The Huntsman Car Park*

May 16 *2 metre DF Hunt. #1. Walking range of Club HQ.*

May 23 *Surplus Equipment Sale.*

For Amateur Radio Exam Training—enquiries to Mike G3JKX (01952 299677)
For Morse Training and Morse Proficiency Tests Martyn G3UKV or Eric M0KZB.
For Equipment Loans & Returns contact Ricky M0RKY or Simon 2E0CHV

Radio Amateur Exams: Latest News: www.tdars.org.uk/html/trainingFoundation.html

VILLAGE HALL, MALTHOUSE BANK, LITTLE WENLOCK, TELFORD, SHROPSHIRE. TF6 5BG

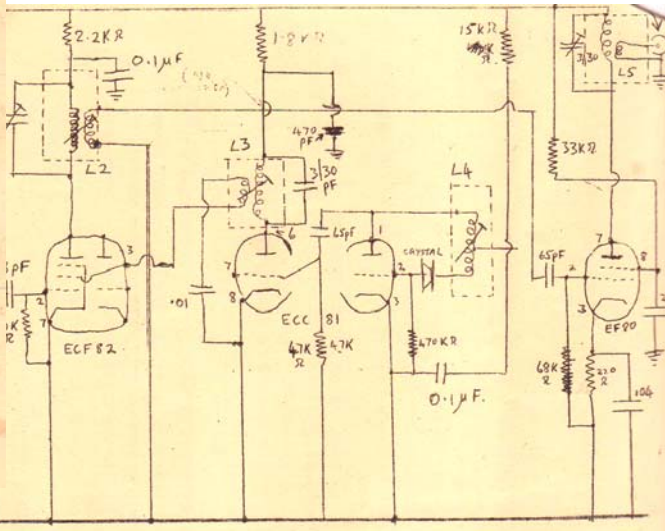
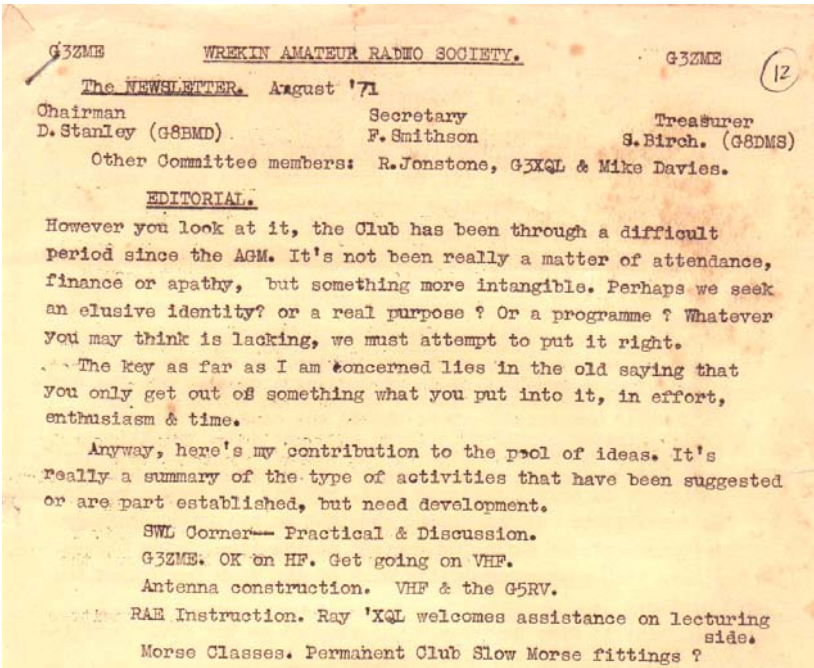
Editorial

Welcome to TDARS Newsletter issue number **250**.

Thanks to Bob M0RJS for the snappy new style front page, which uses a mixture of Photoshop CS3 and Publisher on this desktop PC. As I've said before, computers are quite amazing, but also painfully frustrating at times. But I think I've cracked it for the front page at least.

The earliest copies of the Newsletter I produced back in 1970 relied on a hand turned School-issue Gestetner machine, and of course a standard typewriter for the text. Anything 'graphic' was done with a special wheeled cutting tool—rather like a tile cutter used on bathroom tiles. Drawing a circuit, for example, was a master typographical art form! The way it worked was thus:-The hand tool literally cut through the waxy surface of a special Gestetner Master sheet, in the same way as the individual typewriter letters did for the written text. When complete, the master sheet was carefully wound round an ink-filled cylinder on the Gestetner apparatus, and the cylinder rotated by hand (larger offices had motor driven rotating cylinders). Next to the cylinder, the pre-loaded foolscap paper (this was before the days of A4, A5 paper sizes etc) was snatched by the rotating cylinder, and then impressed with the ink percolating through the waxy master sheet, so printing the text and crude graphics as the paper passed through to the 'out' tray. Even now, I can barely believe it worked—but it did ! It was often a very messy procedure as ink got everywhere by the time each of the usual 4 master pages had been reproduced. For all its clever features, the current TDARS Oki Printer used to print this #250 Newsletter can take at least as long to complete a run of about 60 copies—something always seems to happen to extend a 10 minute process into an hour or so. However, at least the finished product is a far cry from those early indifferent Newsletter pages, and the stuff on my fingers is not just plain black—it can be yellow, cyan, black and magenta in boundless beautiful combinations. The trick is to avoid getting it on your shirt

Here's a couple of examples—August 1971, Newsletter Nr. 12. Note the old Society name (Wrekin ARS); committee names Dave Stanley (G8BMD), Fred Smithson (SWL), Steve Birch (G8DMS), Ray Johnstone (G3XQL), and Mike Davies (SWL—soon-to-be G4AUZ). My editorial and circuit for a 4m transverter (still in use 40 years later !). Also staple holding 2 beige pages (4 sides) together. It all makes you think, doesn't it....progress or what?

MIV

Qtc: News & Information

TELFORD & DISTRICT ANNUAL GENERAL MEETING 28th MARCH 2012

AGENDA:

- 1) Apologies
- 2) Chairman's opening remarks & report
- 3) Minutes of TDARS AGM 30 March 2011
- 4) Matters Arising
- 5) Treasurer's Report & Matters Arising
- 6) Election of 2012-13 Committee
- 7) Presentation of Trophies



Any relevant items for inclusion in the Agenda must be received by the Hon. Sec (Mike, G3JKX) at least 7 days prior to the AGM. (ie by March 21st)

Annual Subs are due at this time—please note the **current** rates are £28, or £22 non-earners, £14 full time students. These amounts could change at the AGM.

Ever since we moved to our **Little Wenlock premises in December 2007**, we have had the minor inconvenience of being unable to meet for the first Wednesday in the month on alternate months at LWVH, due to the Village Hall Committee itself meeting in the room we occupy. Fortunately, thanks to the gentle persuasive voice of Martin 2E0TRO who is TDARS rep on that committee, they now meet on Tuesdays, so we can now hire LWVH every Wednesday without exception. Thanks also to Trevor 2E0TDB for the use of a room at his business premises for the past four years, when we have had to meet elsewhere.

The “**Under a Fiver” construction competition** took place recently. Entries were down somewhat on last year (a total of 9 items from 5 constructors), but quality made up for quantity. Richard G0VXG led the field by a large margin, with his QRP beacon transmitter, that went up in stepped power levels, and gave morse ID, including power level, callsign and e-mail QSL details. Silver plating of the normal copper PCB tracks gave it a really professional finish. Joint runners’ up were Peter 2E0ZSU with his RF power indicator meter and Dave G4EIX’s “OXO” QRP Xtal transmitter. In third place, jointly, were Derek G0EYX’s PSU control board, built into an existing PSU case and Dave G4EIX’s antenna Scope Match unit. Well done to all entrants.

The **TDARS microwave Beacon GB3ZME** on 24 GHz (24048.910 MHz) died sometime in the autumn—the crystal stopped oscillating after a long period of drifting LF. A new 125 MHz TCXO with suitable crystal has been built, and should shortly be operational once again. Thanks to G8UGL, G8VZT, G3UKV and helpful advice from its designer G8ACE.

The **Club's annual Christmas** meal at The Duck was once again well supported, with just over 30 attending—despite illness hitting some would-be attendees. Most enjoyable, and particularly pleasing to have several ladies with us.

The **Indoor Bowls event** (Jan. 11th) turned out to be a very enjoyable evening. Except for Bob (M0RJS), none of us had previous experience (other than with 9 and 10 pin bowling). We split up into joint teams to avoid a total white-wash, and generally surprised ourselves in mostly getting round the mid-course “block” that is a feature of indoor bowls. A break for light refreshments at about 8:30pm and shared chit-chat means a repeat is likely in the future.

TDARS MEETINGS EVERY WEDNESDAY AT LITTLE WENLOCK VILLAGE HALL UNLESS INDICATED OTHERWISE ON THE FRONT PAGE PROGRAMME.

ROOM BOOKED FROM 7PM - 10PM. MEETINGS USUALLY COMMENCE AT 8PM

Please return borrowed equipment promptly

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Ricky, M0RKY has offered to organise a **“Beginners’ Section” - for the Society.** The idea would be to meet at LWVH **before** the main meeting starts (at around 8pm). It would offer a range of activities and support for those new to the hobby of Amateur Radio and Electronics generally. It would particularly help those undertaking, or considering, Foundation level training, and hopefully would enable school age students to be more involved in TDARS. Contacting younger would-be members, as well as transport arrangements and CRB requirements are amongst issues that are being considered. Ricky welcomes anyone who could help in any way—please speak to Ricky with your ideas and offers of practical help.

The **Olympic Games** are rapidly approaching, and with the **Olympic Torch-Bearing** event due in our area on Wednesday **May 30th**, it's time to think about TDARS involvement. Ideas so far have included following the entourage with a mobile HF or VHF station reporting progress (within the terms of our amateur licences) and having our own mini-Olympics in Little Wenlock's village field in the evening. What we now need are unusual (and possibly humorous) ideas to make this unique day something to remember for a long time to come, as well as ensuring we contact the local press/radio for a bit of free publicity. Wotsa ?

With the TDARS AGM due at the end of March, it's time to **return trophies to our HQ** ASAP, especially as several can be engraved before the actual meeting, ready for presentation. Please also **return** any equipment or books which have been borrowed.

Rob MOTOY has offered to place a bulk order for **aluminium hardware** in the near future. Have a look at www.AluminiumWarehouse.co.uk for more details of their huge range of metric and imperial size aluminium. The prices are good (given recent increases in all metals). So, for example, 5 metre lengths of 10mm tube (eg VHF antenna elements) are £9.80, whilst 1" square box (eg antenna boom) costs £9.58 for a 5 metre length. Be sure to select the wall thickness to suit the application—you may think the above examples are rather thin (1mm and 16 swg respectively). There is a single modest (£15-ish total) charge for carriage, and of course the dreaded 20% VAT to be added. Let Rob know your requirements ASAP. They also stock angle, tee and flat aluminium hardware. Money-saving arrangements for **purchasing from Farnell**, as explained in the October Newsletter continue, thanks to Martyn 2E0CTG. Just ask.

The **RSGB UKAC** (Activity Contests) at VHF/UHF/SHF have re-started in January. Basically, each Tuesday evening the various bands come alive from 8-10:30pm local time. With 2 metres on the first Tuesday of the month, 70cm on the 2nd, 23cm on the third, SHF and 6m on the fourth, and 4 metres on the fifth Tuesday (when there is one !). The way it works encourages even a minimal entry to be worthwhile on any of the bands as a club member entry really adds to the global club score. Thus, Telford & DARS came overall 18th of 97 clubs across the UK, even though our scores came from just 4 members in 2011. With a bit more members' commitment, we could easily enter the top ten ! If you came to Dave's talk (Feb.15th) you may be inspired already!

Our **Annual Construction Competition** takes place on March 14. Please consider bringing along anything electronic that has been recently home constructed that evening. It is always interesting to share ideas and projects, even if there is only an outside chance of winning. After all, if everyone took that approach, there would be no entries at all ! Also, there is a 'Novice' trophy for anyone with little or no previous construction experience, which often is quite an eye opener !

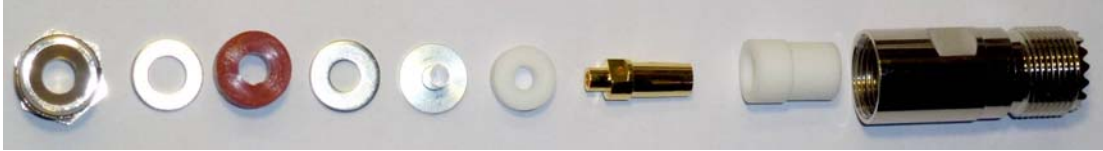
John, M6BAF is keen to organise a public presentation of TDARS at this year's **Lion's Day on Wheels at the Bowring Park in Wellington**. It runs from 10am to 4pm on Saturday 7th. July, and admission is free, but of course there is a charge to set up a community stand. The big snag is that it clashes with VHF NFD, and John is keen to ensure that our presence at the event in no way lessens our Field Day support or effort. Let John know if you are interested. No decision yet.

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Assembly Guide For Compression Type SO239 – As used in the Balun Project

by Rob MOTOY

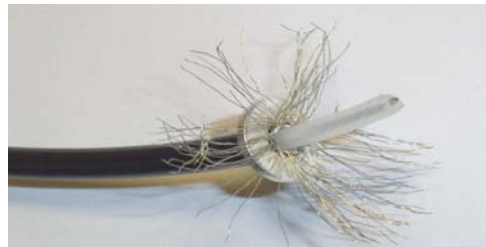
Correct Sequence of Parts:



1) Place back-nut, washer (with larger hole) and rubber sleeve over cable and slide away from end:



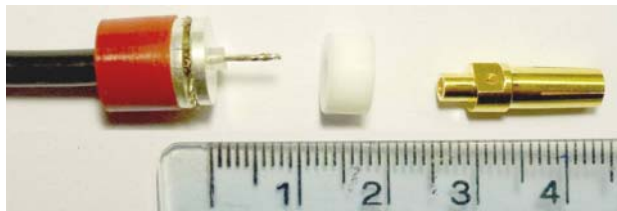
2) Strip off 15mm of the outer black sheath. Slide the second washer (with smaller hole) over the braid then splay out:



3) Push ferrule inside of braid. Note how this expands the outer sheath



4) Slide rubber sleeve up to washer and trim braid neatly. Strip 10mm of the inner white dielectric, leaving about 2mm. Note that the first white PTFE insulator has a recess in the back to go over the 2mm of dielectric. Use a soldering iron to “tin” the inner conductor.



5) Heat the brass socket using a soldering iron on only the flat part. Once hot, solder can be fed in through the hole. When nearly full, slide onto the cable inner conductor tight against the PTFE insulator. Any solder that gets onto the outer round surfaces should be filed off.



6) Add the second PTFE insulator and ensure it is tight against the other.



A close-up photograph of a metal cable connector. The connector is cylindrical and made of polished metal, likely brass or stainless steel. It has a threaded section on the right side with a serrated, cone-like end. A black cable is attached to the left side of the connector. The background is a plain, light-colored surface.

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THANKS to Rob M0TOY, Simon 2E0CHV, John M6BAF, Peter M1FGN, Paul M0PNN, Richard G0VXG for Newsletter input. Next publ. #251 April 2012. Input always welcome !

SOTA Activations of Brown Clee (G/WB002) and Titterstone Clee (G/WB004) by David M0YDH and John M6BAF : Friday 20th January 2012

It was a dark cold day with no prospect of getting warmer, in fact it was settled in for the day. Our first activation was Brown Clee in the South Shropshire hills, and about an hour's drive away. Our activation time given on Sotawatch (<http://www.sotawatch.org/alerts.php>) was for 10:30am. We found our way to the foot of the Brown Clee and started the walk up to the top. Muddy and slippery was the best way to describe the footpath. Pretty soon we gained some height and with that the wind and the mist. This was not a problem, though, as our spirits were high.

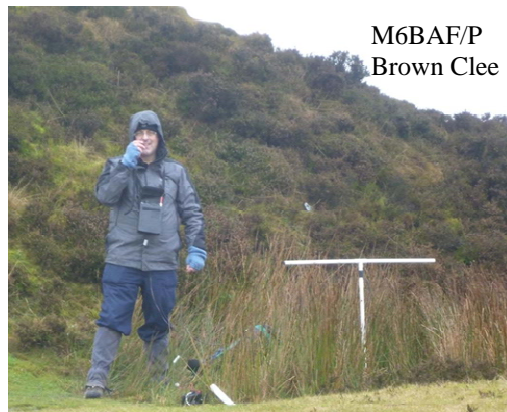
I was the first one to get set up on 2m FM with my Sotabeams 2m dipole, quickly gaining my four contacts required for activation, before moving over to 2m SSB.

7 Contacts on 2m FM including M0FHM (Don)

2 Contacts on 2m SSB including G3UKV (Martyn)

Meanwhile David set up his multiband HF antenna working several stations more than me on 5Mhz & 7Mhz, both of us happy to have made some good contacts:

9 Contacts on 5Mhz SSB including G3*** (who prefers to stay anonymous) and 22 Contacts on 7Mhz SSB including G3UKV (Martyn)



M6BAF/P
Brown Clee

Next a trip over to Titterstone Clee to repeat the exercise, but not before a break for lunch; without a sandwich box my sandwiches were a little squashed, but at least my flask kept the soup nice and hot. The trip from Brown Clee to Titterstone Clee does not look too far, but as the roads wind around somewhat, the journey lasted longer than we thought it should – even with Billy Connelly leading the way for us (David's TomTom voice of choice). We arrived at the lead in towards the car-park, David deciding to have – as he put it – a ‘Top Gear’ moment. Well all the pot holes did look flat once the water was in them!

We sat in the car for a while, deciding on our simple strategy plan, which was “Let's see what we find when we get there and then decide!” If you know Titterstone Clee, then you will know that the distance to the top from the car park is not that great, so in a short time we were strolling through the heather alongside the 'golf ball' that subtly introduces you to the top of the hill. There was only one place to head, and that was at the ironstone shelter just below the summit trig point. So back to the strategic planning – simple – get the four QSOs we need out of the way and then see what we can do afterwards.

Fortunately our four were completed quickly, both of us sharing the first four contacts on 2m SSB including 2E0DTB (Dave), at this point David disappeared over the wall determined to try and get out on 40m, rucksack in hand that was the last I saw of him for about an hour. I continued to work 2m SSB despite the windy weather's determination to disrupt my work by spinning my antenna round. It was hard work holding a mic in one hand, the antenna in another and then making notes in my log as well! Nevertheless, I managed to get 5 more contacts on SSB including G3UKV (Martyn), and my furthest QSO on this mode so far G0ROL, Don in Devon. The band seemingly completed, I packed away my gear and went in search of my activation partner.

The plateau on top of Titterstone Clee is quite flat, and therefore David should not have been so hard to find. I walked for several minutes before I saw the top of his fishing pole keeping his inverted V antenna in the air; he was busy working 5Mhz, professing that 40m was full up and no space in the bands for him to work. On 5Mhz David managed 8 contacts. After standing around waiting for David to complete his



Shelter, of sorts...(Titterstone)



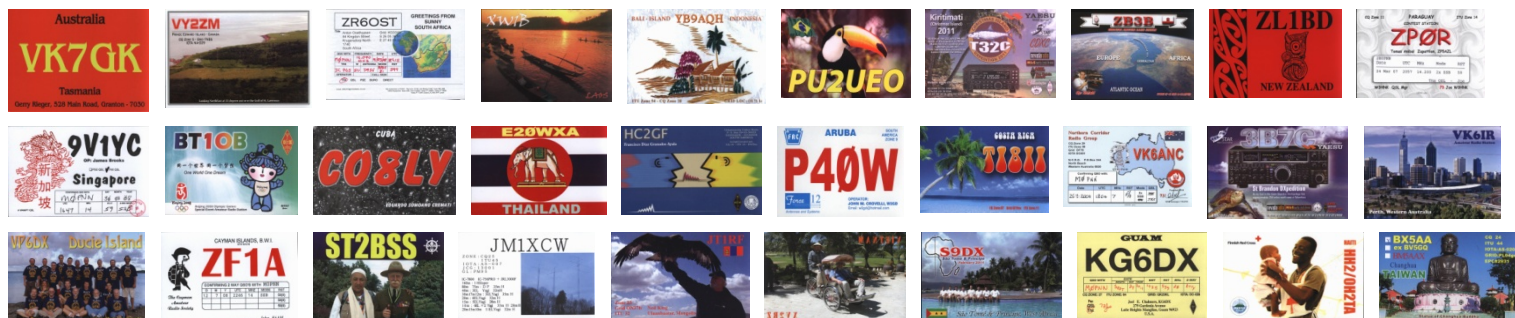
John
M6BAF

David
M0YDH

David Yaesu FT-817, Homebrew inverted V multiband ant.



And finally, one of TDARS newest Foundation successes, Robin M6LMD (John's Jnr. Op) out on a SOTA site—the Wrekin—in QSO with Ricky M0RKY recently.



On the 20th January the QSL of T32C dropped through the letterbox. Nothing unusual in that you may think, but it's my **200th** confirmed DXCC Country. It's taken 6 years almost. Thanks to Mike G3JKX and Eric M0KZB for their tuition and everyone at the Club for your help and advice.

No Amps, just 100 watts and no beams. Cheers ! Paul M0PNN

TELFORD & DISTRICT AMATEUR RADIO SOCIETY

Trophies/Certs: G3UKV & M1RKH. QSL Manager David M0EMM; Ass. Curator: Simon 2E0CHV (01588 673053)

By Simon 2E0CHV

My how time flies! It only feels like yesterday since I wrote a report for the TDARS newsletter recalling the exploits and the 'trials, tribulations and a whole heap of fun in Tywyn. You may recall that even the high winds, loss of a club tent and damage to our aerals could not deter our intrepid group from having a thoroughly enjoyable time! So here I am, sat indoors on a freezing February morning, looking forward to this year's event.

International Marconi Day (IMD), for those of you who don't know, is held on the Saturday in April which is nearest to Marconi's birthday. Various groups of amateurs are encouraged to set up award stations operating from former Marconi sites in the UK, Europe and North America using special call signs. Amateurs can claim awards for making contact with a certain number of these stations, something which we did not achieve in 2011, but we had immense fun trying! This year is also the 25th anniversary of IMD, so activity and interest should be quite intense. Our special call sign is GB8MD.

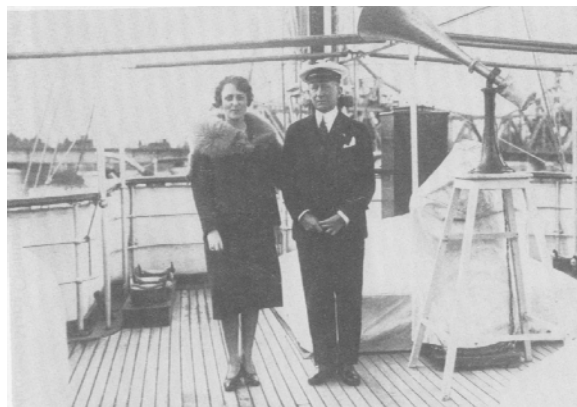
IMD 2012 will take place on **Saturday 21st April** and once again TDARS plan to take part from the Tywyn site, which is situated on the west Wales coast in glorious countryside on the edge of Snowdonia National Park. The landowner, Sir Meurig Rees, has once again graciously agreed for us to use the field adjacent to the Marconi bungalows and our rather unique provider of water and electric has once again agreed to supply us with these essentials. So all systems are go, but this is where **we need your help!**

We need volunteers to not only operate, but also set up and dismantle the station. The plan is to arrive on site around midday on Friday 20th April to set up and test the station, in readiness to operate the station on the 21st. After the event, we will then dismantle the station on the Sunday morning (22nd) and make our weary way home. As usual there are two choices of accommodation, camping in the Marconi field, or Leahurst B & B which is located over the road. Dave, G8VZT would recommend the B & B and if you are interested, just ask me for details.

So there you have it, who is up for the challenge of IMD 2012?
Surely the weather will be kinder to us this year and hopefully the HF bands will be in better shape too!

I look forward to the flood of volunteers.

'73
Simon
2E0CHV
01588 673053, 07807 306699
m3set@yahoo.co.uk



Marconi and his second XYL (Maria) in 1928
His first marriage to Beatrice (1905) ended in
divorce in 1924. He had a total of 4 daughters,
but no sons. Now you know !

Signed photo of Elettra in Genova, Italy.
The Elettra also moored at Aberdovey (near Tywyn) in 1918 when he visited receive station “MUV” in Tywyn.

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**“First Human to Orbit the Earth:”** Compiled by Peter M1FGN

To celebrate the 50th anniversary of manned space exploration, here is a brief excerpt from Mark Williamsons article in the IET Engineering and Technology Journal of April 2011. Whilst not directly related to amateur radio, manned space travel features the longest ever distance TX/DX. This is President Nixon calling the Apollo astronauts after they had landed on the moon in 1969, a point to point distance of 240,000 miles or round trip of nearly 500,000 miles. This is a lot longer than terrestrial TX/DX. Of course, if you make any communication by phone via satellite you can get up to 72,000 miles (geostationary satellite orbit is at 36,000 miles above the earths surface.) but this is still less than 240,000 miles. Graphic items are from the Metro of 11<sup>th</sup> April 2011 and photograph of the Vostok 1 Capsule is from Metro of 14<sup>th</sup> April 2011 *and are shown on the back page of a previous newsletter.*

(October 2011—Ed)

Now back to the excerpt:-

We live in an age when the ability to conduct successful and repeated flights into orbit around the Earth is largely taken for granted. The International Space Station has been occupied continuously for more than a decade, and the Russian Soyuz rocket, which launches satellites and ferries astronauts to the station, has made more than 1760 flights.

When cosmonaut Yuri Gagarin boarded his capsule on a Vostok rocket on 12th April 1961, the world was very different. Computers were typified by IBM's room-sized 1400 mainframe; telephones had rotary dials and plugged into the wall; and the ultimate in performance cars was the newly introduced Jaguar E-Type, costing just £2,200.

More important though, the world was in the midst of the Cold War - a notional hiatus in hostilities the pitched the USA and the USSR into a battle for technological supremacy, with spaceflight as a key political tool. The space race began with the launch of the first artificial satellite, Sputnik 1, on 4th October 1957 - an event that struck fear into the heart of mainstream America.

While President Eisenhower had dismissed the Sputnik as "one small ball in the air", President Kennedy's reaction to Gagarin's mission was quite different: he was impatient for an equitable response. At a meeting with advisors and senior Nasa officials two days after the flight, he implored "Just tell me how to catch up. Let's find somebody. Anybody. I don't care if the Janitor over there has the answer, if he knows how."

Kennedy had little knowledge of the technology required for manned spaceflight, but he no difficulty in recognising its importance for America and the world at large. In that sense, it was Gagarin's mission that triggered the second phase of the space race - that of landing a man on the Moon - and the raft of technologies: from propulsion systems to guidance computers that would make it possible.

Just six weeks after Gagarin's triumphant orbit, and 20 days after Shepard's 15-minute suborbital hop, Kennedy made his famous commitment to land a man on the Moon before the end of the decade. Integrated circuits were not available commercially until 1961, but by the summer of 1963 some 60% of US output was being used in prototypes of the Apollo guidance computer. An analogue world had become digital... and the rest is history.

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**From Richard G0VXG .....**Overheard in local hardware shop - today

Customer: "I would like a bulb for this lamp",

Salesman screws a bulb into holder, but some of the screw thread is showing above the top of the holder.

Salesman: "Its a bit dangerous, that, you could get a shock off it"

Customer: " No it will be ok, you could even put your tongue on it"

Salesman: "Why's that?"

Customer: "Because it has a 3 amp fuse in the plug"